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THE VALUE OF LAND ARMAMENTS
EXPORTED TO THE MIDDLE EAST

BY THE SOVIET BLOC*

1 JULY 1955 - 30 JUNE 1956

Summary

By negotiating "arms deals" or armament contracts with Egypt and Syria, the Soviet Bloc continued its campaign of economic penetration in the underdeveloped areas of the Middle East in 1955 and 1956. The contracts provided for the export to Egypt and Syria of armaments from the Soviet Bloc -- primarily from the USSR and Czechoslovakia -- with a total value of approximately £110 million** (\$310 million***). The countries with which contracts for armaments were signed during the period 1 July 1955 - 30 June 1956 and the value of such contracts were as follows: Egypt, £94 million (\$260 million), and Syria, £18 million (\$50 million). Actual delivery of all the armaments sold under these contracts may not be completed until early 1957.

^{***} In this report the pound sterling is converted to US dollars at the official rate of exchange (1£ equals US \$2.80). The dollar figures are not to be interpreted as representing the true dollar value of the items exported by the Bloc, because the official exchange rate does not necessarily reflect an accurate ratio of the purchasing power of the two currencies, particularly when dealing with the defense industry. The values are expressed in dollars only to assist the reader. Because of conversion, the dollar figures may not add to the totals.



^{*} The estimates and conclusions contained in this report represent the best judgment of ORR as of 1 August 1956.

^{**} All figures referring to values or prices in this report are rounded to two significant digits with the exception of those prices which were taken quoted in pounds sterling.



Land armaments* accounted for a minimum of approximately £ 29 million (\$81 million) distributed as follows: Egypt, £ 22 million (\$62 million), and Syria, £6.6 million (\$18 million). These values are considered minimal because the quantities and prices of certain items known to be included in the armament contracts are not available. The total value of the land armaments sold to Egypt and Syria is probably as high as £32 million (\$90 million).

The few instances in which it is possible to compare the prices of specific items with the estimated costs of production of the same items indicate that the prices are fair and are rather closely related to the costs of production.

In addition to armaments, large quantities of petroleum products also were exported to Egypt and to Syria by the Soviet Bloc. Moreover, experts and technicians were sent by the Bloc to the Middle East to assemble the weapons and to train Egyptians and Syrians in their use and maintenance, while Egyptians and Syrians were sent to Bloc countries for training in the use of the weapons and other equipment.

The Soviet Bloc may send up to \$40 million worth of land armaments to Afghanistan and lesser quantities to Yemen.

^{*} The term land armaments as used in this report includes the following: armored fighting vehicles, artillery, rocket launchers, mortars, bazookas, machineguns, small arms, land mines, bombs, grenades, and military vehicles; all types of ammunition except naval torpedoes and sea mines; and electronic equipment and miscellaneous equipment generally associated with the ordnance, engineer, medical, and quartermaster sections of the military.



I. Introduction.

This report reviews the exports* of land armaments to the Middle East from the Soviet Bloc during the period 1 July 1955 to 30 June 1956. The Bloc countries supplying such exports are primarily the USSR, Czechoslovakia, and Poland. The value of land armaments involved in the "arms deals" or armament contracts is derived from the quantities and prices of armaments

On this basis, a minimum figure of \$29 million (\$81 million) was obtained.**

The export of land armaments by the Soviet Bloc is of considerable value as a means of economic penetration. The recent equipping of the Soviet Army with new models of land armaments resulted in a sizable stockpile of obsolescent weapons. It is therefore very much to the advantage of the Bloc to find a market for these older weapons. In addition, the trade in arms with the Middle East creates a new market for the output of munitions factories in the Bloc, particularly in the European Satellites, thus providing an economical means of maintaining the productive capacity of these factories.

II. Armament Contracts.

The Soviet Bloc exported considerable quantities of armaments to the Middle East during the second half of 1955 and the first half of 1956. This unprecedented action was accomplished primarily through the conclusion of armament contracts with Egypt and Syria. These contracts called for the export of armaments, principally from the USSR and Czechoslovakia, with a total value of approximately £110 million (\$310 million). This figure, which includes

^{*} The term exports as used in this report refers to those items for which contracts have been negotiated and does not infer that all deliveries have been made.

^{**} For an explanation of the maximum figure, £32 million (\$90 million), see methodology, Appendix A.



the total value of land armaments, naval equipment, air equipment, and other related costs, is distributed by country as follows: Egypt, £ 94 million (\$260 million), and Syria, £18 million (\$50 million).

Of the total for both countries, land armaments alone accounted for a minimum of £29 million (\$81 million). This figure is the estimated value of the land armaments for which contracts were signed. These values are considered minimal because the quantities and prices of certain items known to be included in the armament contracts are not available. The total value of the land armaments sold to Egypt and Syria is probably as high as £32 million (\$90 million).

The delivery of the armaments has not been completed and probably will continue until early 1957. Table 1* gives a breakdown of the value of the various types of land armaments being exported to Egypt and Syria by the Soviet Bloc.

The armaments being exported to Egypt and Syria by the Soviet Bloc include substantial amounts of air and naval equipment as well as land armaments.

Large quantities of petroleum products also are being exported to Egypt and to Syria by the Soviet Bloc. Under the terms of the contracts, experts and technicians have been sent by the Bloc to the Middle East in order to assemble the equipment and to teach courses in the use and maintenance of the weapons, and Egyptian and Syrian service personnel have been sent to Bloc countries for training in the use of the equipment and weapons. Although it was not possible to estimate all of the above costs, estimates of the values of the air and naval equipment exported by the Bloc have been made. The value of the air equipment is estimated at £36 million (\$100 million), or 33 percent** of the total value of the

^{*} Table 1 follows on p. 5.

^{**} For methodology, see Appendix A.

Table 1

Value of Land Armaments Exported to Egypt and Syria by the Soviet Bloc $\frac{a}{2}$

	Egypt	ypt	Sy	Syria	Tc	Total
Item	Million £ b/	(Million US \$)	Million \$ p/	(Million US \$)	Million & b/	(Million US \$
Armored fighting vehicles	6.9	19.0	3.8	11.0	11.0	30.0
Artillery	1.9	5,3	0.8	2.4	2.7	7.7
Special weapons	0.1	0.3	N.A.	N.A.	0.1	7 %
Small arms	1.8	5.0	0.2	0.5	2.0	5.5
Mines, bombs, rockets,		•				P
and grenades	1.3	3.6	0.4	1.2	1.7	%.4. ⊗.4.
Ammunition	8.1	23.0	1.2	3.4	9.3	26.0
Motor transport vehicles	1.9	5,3	0.0	0.1	1.9	.4.? CK
Miscellaneous ordnance				•		E7
equipment	N.A.	N.A.	0.2	0.4	0.2	4.
Total	22.0	62.0	6.6	18.0	29.0	81.0

b. Pounds sterling. £ 1 equals US \$2.80.



armament contracts, and the value of the naval equipment is estimated at £17 million (\$48 million), or 15 percent* of the total. The addition of the value of the land armaments -- which account for £29 million (\$81 million), or 26 percent -- brings the total value of known armament sales to £82 million (\$230 million), or 74 percent of the total value of the armament contracts. The remaining £28 million (\$78 million), or 25 percent of the total value, probably include the value of the petroleum products, training and instruction costs, and the value of land armaments which could not be estimated by the methods used in this report.

In addition to its armament treaties with Egypt and Syria, the Soviet Bloc conducted negotiations for the sale of land armaments to Afghanistan and to Yemen. The Bloc concluded armament contracts with Afghanistan in the second half of 1955. Yemen contacted representatives of the USSR in an effort to procure armaments, but reports that contracts were concluded have not been confirmed.

The technique employed by the Soviet Bloc in its armament contracts with the Middle Eastern countries appears to follow a pattern. Representatives of the USSR contacted officials of the government interested in securing armaments and conducted the preliminary negotiations. Czechoslovakia, representing the Bloc in the final negotiations (most of which were held in Prague), acted as the official exporter of the armaments under the contracts. In the USSR would remain the senior partner in these contracts, exercising the right to make final decisions as to the rejection of acceptance of orders placed for armaments, and the prices at which the armaments were to be sold.

Poland apparently also was involved in the armament contracts.

Actually, Poland was responsible for exporting only 20 metric tons of armor plate and some barbed wire to Egypt.

that Soviet-produced military vehicles were sold to Egypt under Polish contracts. Poland, like Czechoslovakia, probably has served as a front for the USSR in these armament contracts. Poland now apparently is competing with Czechoslovakia

^{*} For methodology, see Appendix A.

for the sale of ammunition to Syria, and has offered military trucks of Polish manufacture for sale to Syria. A contract for the export of mortars from Poland to Syria also was being negotiated. 1/*

it appears probable that Poland will replace Czechoslovakia as the exporter of the remainder of the armaments to be sold to Syria by the Soviet Bloc. 2/

Although the deliveries of armaments to Egypt by the Soviet Bloc are not completed, the negotiations for their sale were apparently terminated in April 1956.

a contract was signed on 10 April 1956. This contract probably was the third and final one in the series. No further evidence is available to indicate that negotiations involving the export of arms to Egypt by the Bloc are still in process.

III. Exports of Land Armaments.

A. To Egypt.

The exports of land armaments from the Soviet Bloc to Egypt, as shown in Table 2,** are estimated at approximately £ 22 million (\$62 million). This figure is considered minimal because Egypt has received items on which there is a lack of information concerning type, price, or quantity. For example, Egyptian requirements for military vehicles were stated as being 4,000 to 5,000, 3/ but \Box account for only 1,060 military vehicles (1,716, if armored fighting vehicles are included). The Bloc also has exported to Egypt unknown quantities of such items as heavy antiaircraft guns -- probably 85 millimeter (mm) -- 12.7-mm antiaircraft machineguns, and antipersonnel mines. Egypt also has received large amounts of miscellaneous ordnance equipment which could not be priced. This equipment included radar, radios, pontoon bridges, searchlights, and mineclearing apparatus. ***

^{*}For serially numbered source references, see Appendix C.

^{***} Table 2 follows on p. 8.

^{***} Continued on p. 11.



Table 2

Exports of Land Armaments to Egypt by the Soviet Bloc July 1955 - June 1956

		Val	ue <u>a</u> /*
Item	Quantity b/	Thousand £ c/	Thousand US,\$
Armored fighting vehicles			
JS-3 heavy tank	60 4/	1,600	4,500
T-34 medium tank SU-100 self-propelled	$170 \frac{1}{5}$	3, 100	8,700
gun	25 6/	520	1,400
Tank recoverer BTR-152 personnel	1 7/	8	22
carrier	400 8/	1,700	4,800
Total	. •	6,900	19,000
Artillery			•
152-mm d/gun-howitzer			
(with spares and ammuni-			
tion)	32 <u>9</u> /	350	980
122-mm gun (with spares			
and ammunition)	58 <u>10</u> /	612	1,700
122-mm howitzer (with		400	
spares and ammunition) 85-mm antiaircraft gun	80 <u>11</u> /	480	1,300
57-mm antitank gun	N.A. 30 12/	N. A.	N. A.
37-mm antiaircraft gun	$\frac{30}{120} \frac{12}{13}$	51 4 00	140 1,100
Total		1,900	5, 300

^{*} Footnotes to Table 2 follow on p. 10.



Table 2

Exports of Land Armaments to Egypt by the Soviet Bloc

July 1955 - June 1956

(Continued)

		Valu	ne <u>a</u> /
Item	Quantity b/	Thousand £ c/	Thousand US \$
Special weapons			
M-13 rocket launcher RPG-2 bazooka	$\begin{array}{c} 16 \underline{14} / \\ 2,000 \underline{15} / \end{array}$	58 26	160 73
Total		<u>84</u>	240
Small arms			14+4
12.7-mm antiaircraft machinegun 7.62-mm rifle PPS-1943 submachine		N.A. 1,500	N.A. 4,200
gun Total	25,000 <u>17</u> /	320 1,800	900 <u>5,000</u>
Mines and bombs			The state of the s
Napalm bombs Antipersonnel mines Antitank mines	10,000 <u>18/</u> N.A. 200,000 <u>19/</u>	460 N.A. 860	1,300 N.A. 2,400
Total	•	1,300	3,600



Table 2

Exports of Land Armaments to Egypt by the Soviet Bloc

July 1955 - June 1956

(Continued)

				Value a/						
Item		Quantity	<u>b</u> /	(Thousand £	<u>c/</u> (Thousand US \$					
Ammunition					the state of					
85-mm tank		112,000 rds	se/20/	1,400	3,900					
37-mm aircraft		48,000 rds		48	130					
20-mm aircraft		192,000 rds		96	270					
.303 caliber	160	,000,000 rd	·	3,400	9,500					
7.62-mm		,000,000 rd:		3,200	9,000					
Total	,			8,100	23,000					
Motor transport vehicle	s			!						
ZIS-151		500 25	,	1,200	3,400					
GAZ-63		$500 \overline{26}$		700	2,000					
Skoda-706		$60\overline{27}$		N.A.	N.A.					
T-111		N.A.	· ·	N.A.	N.A.					
Total	·			1,900	<u>5,300</u>					
Grand total				22,000	62,000					

a. See price information in Table 4, p. 18, below. Because of rounding, figures may not add to totals shown. Totals are minimal.

b. Units (unless otherwise specified).

c. Pounds sterling. £1 equals US \$2.80.

d. Millimeter.

e. Rounds.



Other significant items for which no values have been included are the ammunition and spare parts required annually for the use and proper maintenance of the land armaments purchased from the Soviet Bloc. In some instances -- for example, the 122-mm gun -- ammunition and spare parts were known to be included in the price of the weapon. 28/ The ammunition involved in the example cited was 65 rounds with each gun, and it can be assumed that the spare parts were concurrent spares. The spare parts required annually for maintenance and any ammunition for stockpiling are thus left unaccounted for in the estimated value of land armaments.

indicate that the Soviet Bloc also is providing ammunition for the British-made weapons used by Egypt. 29/ The value of this ammunition is unknown.

B. To Syria.

The exports of land armaments to Syria are estimated at approximately £6.6 million (\$18 million). Table 3* shows a breakdown of these armaments. As in the case of Egypt, this figure for the land armaments exported to Syria by the Soviet Bloc is considered minimal. Large quantities of miscellaneous ordnance and quartermaster equipment were purchased from the Bloc, but the value of this equipment could not be estimated. For example, Syria ordered such military vehicles as the T-111 and the V-3MS from Czechoslovakia, but the number of such vehicles could not be determined. It was also impossible to determine the number of medical vehicles for surgical, dental, and X-ray purposes. Among the ordnance equipment for which no estimate was possible are wireless equipment for all types of units, radar, mine detectors, motorcycles, and field glasses. The substantial quantities of quartermaster supplies for which prices are not available include 385,000 yards of material for uniforms, 30/152,000 pairs of boots, 31/ and 3,000 tanker helmets. 32/

Syria, like Egypt, probably imported more ammunition and spare parts for the weapons than are accounted for in Table 3.**

^{*} Table 3 follows on p. 12.

^{**} The spare parts included replacement parts for 3 years. (Text continued on p. 15.)



Table 3

Exports of Land Armaments to Syria by the Soviet Bloc

July 1955 - June 1956

		Valu	ıe <u>a</u> /*
Item	Quantity b/	Thousand £c/	(Thousand US \$
Armored fighting vehicles			•
T-34 medium tank (with			:
spares and ammunition)	80 33/	2,800 d/	7,800
SU-100 self-propelled			,
gun (with spares and			
ammunition)	18 34/	470	1,300
150-mm <u>e</u> / self-propelled			٠.
gun (German)	20 35/	N.A.	N.A.
BTR-152 personnel carrier	120 <u>36</u> /	520	1,500
Total		2 000	11 000
Total	•	3,800	11,000
Artillery	•		
122-mm gun (with spares			•
and ammunition)	25 <u>37</u> /	260	730
122-mm howitzer (with			
spares and ammunition)	38 38/	230	640
85-mm antiaircraft gun	_30 39/	190	530
37-mm antiaircraft gun	48 40/	160	450
Total	·	840	2,400
Small arms			
M-25 submachinegun (with			~ ~ ~
spares)	$15,000 \frac{41}{}$	<u>190</u>	530

^{*} Footnotes for Table 3 follow on p. 14.



Table 3

Exports of Land Armaments to Syria by the Soviet Bloc

July 1955 - June 1956

(Continued)

		Valu	ıe <u>a</u> /
Item	Quantity b/	(Thousand £c/	(Thousand US\$)
Rockets and grenades			
Aircraft rockets	6,000 42/	276	770
Hand grenades	$325,000 \overline{43}/$	160	450
Total		440	1,200
Ammunition			
150-mm self-propelled			.
gun (German)	50,000 rds f/ 44/	1,000	2,800
122-mm gun	N.A. 45/	N.A.	N.A.
120-mm mortar	$N.A. \overline{46}$	N.A.	N.A.
50-mm PZ-3 tank	<u></u> .		
(German)	10,000 rds 47/	N.A.	N.A.
37-mm aircraft	36,000 rds 48/	36	100
20-mm aircraft	144,000 rds $\frac{49}{4}$	72	200
9-mm small arms	7,000,000 rds $\frac{50}{}$	N. A.	N.A.
7.62-mm small arms	$2,000,000 \text{ rds } \overline{51}/$	42	120
Total		1,200	3,400
Motor transport vehicles			
T-805 (ambulance)	30 52/	34	95
T-111	N. A.	N. A.	N.A.
V-3MS	N.A.	N.A.	N.A.
Total		34	<u>95</u>



Table 3

Exports of Land Armaments to Syria by the Soviet Bloc July 1955 - June 1956 (Continued)

		Value <u>a</u> /							
Item .	Quantity b/	(Thousand £	$\frac{1}{\sqrt{2}}$ (Thousand US \$)						
Miscellaneous ordnance equipment									
Radar and electronic units for									
antiaircraft guns	4 53/	80	220						
Water purification unit	$1\overline{54}$	43	120						
4-ton crane	1 55/	5	14						
Gun sights	513 <u>56</u> /	5 ;	14						
PZ-3 tank tracks	$100 \overline{MT} g / \underline{57} /$	20	56						
Total		150	420						
Grand total		6,600	18,000						

a. See price information in Table 4, p. 18, below. Because of rounding, figures may not add to totals shown. Totals are minimal.

- f. Rounds.
- g. Metric tons.

b. Units (unless otherwise specified).

c. Pounds sterling. £1 equals US \$2.80.

d. This figure is the value of the tank plus spare parts, ammunition, and mobile workshops, which were included in the contract.

e. Millimeter.



These additional imports are indicated by the substantial quantity of spare parts and ammunition included for the T-34 medium tanks (12 units of fire, * or 660 rounds) 58/ and for the MIG-15 fighter aircraft (25 units of fire, or 5,000 rounds). 59/

the Soviet Bloc may be exporting arms of foreign manufacture (Hispano-Suiza 20-mm and 37-mm guns) to Syria, 60/

C. To Afghanistan.

Various open sources indicate that the Soviet Bloc concluded two armament contracts with Afghanistan in the second half of 1955. According to present estimates, the Bloc may export as much as \$40 million worth of land armaments to Afghanistan. Negotiations for further contracts between the Bloc and Afghanistan are being continued. The armament contracts with the Bloc emphasize primarily land armaments but may also include aircraft. Among the land armaments to be exported by the Bloc are artillery, mortars, rifles, and ammunition. The information available is insufficient to permit a more detailed analysis of such exports.

D. To Yemen.

In the second half of 1955 the USSR was contacted by representatives of Yemen in an effort to buy armaments. Although a tentative agreement was reached whereby the USSR would export arms to Yemen, using Czechoslovakia as a front, no confirmation of the agreement was forthcoming. 61/ in the first half of 1956 indicated the possibility that negotiations were continuing between the governments of Yemen and Czechoslovakia. 62/ The tentative agreement with the USSR called for the export of substantial amounts of land armaments, including small arms, artillery, armored fighting vehicles, and ammunition. 63/ Because there is no conclusive evidence that a contract was drawn up between the Soviet Bloc and Yemen, it was not considered advisable to include in this report estimates of the value of the items listed in the tentative agreement.

^{*} A unit of fire is a unit of measure for the supply of ammunition. This measure represents a specified number of rounds per weapon -- a nominal supply of ammunition for one day -- which varies with the type, caliber, and individual rate of consumption of a weapon.





IV. Price Data on Exports of Land Armaments.

The known prices of land armaments exported to non-Bloc countries by the Soviet Bloc in 1955-56 are listed in Table 4.* These prices apply particularly to Egypt and Syria. In some instances -- for example, the T-34 medium tank -- the price of the item sold to Egypt differs from the price of the same item sold to Syria.

It is difficult to assess most of the prices with respect to the costs of producing the items. It also is difficult in many instances to determine the country of origin of a particular item. The comparisons which can be made indicate that the price quoted for the armaments is a fair price, rather closely related to the original cost of production. One of the T-34 medium tanks received by Egypt, which can be identified from a photograph as a model produced in the USSR in 1946, is estimated to have cost \$54,000 to produce in 1946. 64/ This tank was sold to Egypt for £18,000 (\$50,000). Similarly, an SU-100 self-propelled gun which is estimated to have cost \$56,000 to produce 65/ was sold to Syriâ for £21,500 (\$60,000).

Prices were estimated in some instances when it was thought that the information available was adequate to warrant such estimates. An explanation of these estimated prices follows.

The prices of the JS-3 heavy tank and the 152-mm gun-howitzer were derived by applying to the known prices for similar items ratios which were based on weight comparisons. The price to Egypt of the SU-100 self-propelled gun was derived by applying to the known price paid by Syria for this weapon a ratio based on a comparison of the prices paid by Egypt and by Syria for the T-34 medium tank.

Although the M-13 rocket launcher is a Soviet weapon usually mounted on a ZIS-151 truck, the M-13 rocket launcher purchased by Egypt was mounted on a Czechoslovak air-cooled vehicle, probably the T-111. The price of the M-13 rocket launcher used here was

^{*} Table 4 follows on p. 18.

based on the cost of the Czechoslovak T-111 truck because the launcher itself is a relatively inexpensive item to manufacture.

vere estimated p	rices
The price of	the 122-mm gun ammunition a
<u> </u>	is considered exorbitant by comparison with
he other ammuni	tion prices quoted by the Soviet Bloc.

The prices for the GAZ-63 and ZIS-151 trucks are converted from ruble prices in 1952 at the official rate of 4 rubles to US \$1.

Other estimated prices are based solely on US price data. 67/

Table 4

Prices of Land Armaments Exported to the Middle East by the Soviet Bloc July 1955 - June 1956

:	,	T	OP	SEC	RET									
	CIF d/ Alexandria		CIF Alexandria CIF Beirut	CIF Alexandria To Egypt and Syria				and	To Syria	To Egypt and Syria To Egypt and Syria	r de la companya de l	ytal	To Egypt	To Egypt
	73,000	53,000	59,000 60,000	22,000 12,000		31,000	30,000	17,000	17,000	4, 700 9, 300			10,000	36
	26,000 c/ 18,000 68/	, 750	$21,000 \frac{c}{2}$ $21,500 \frac{70}{7}$	8,000 $\frac{71}{4}$,300 $\frac{5}{1}$		11,000 c/	10,555 72/	6,000 73/	6,200 74/	$\frac{1,689}{3,333} \frac{(5)}{76}$			3, 600 c/	13 <u>c</u> /
	USSR	USSR	USSR USSR	USSR USSR		USSR	USSR	USSR	USSR	USSR			Czechoslovakia	USSR
Armored fighting vehicles	JS-3 heavy tank T-34 medium tank		SU-100 self-propelled gun	Tank recoverer BTR-152 personnel carrier	Artillery	152-mm e/gun-howitzer (with spares and ammunition)	122-mm gun (with spares and ammunition)	ammunition)	85-mm antiaircraft gun	or-mm antitank gun 37-mm antiaircraft gun	Special recognition	Upderal weaptits	M-13 rocket launcher	RPG-2 bazooka
		TC	$OP^{\frac{1}{2}}$	SKCF	RET			•						
	Armored fighting vehicles	USSR 26,000 c/ 73,000 CIF	USSR 26,000 c/ 73,000 CIF d/ Alexandria USSR 18,000 68/ 50,000 CIF Alexandria USSR 18,750 69/ 53,000 CIF Beirut	USSR $26,000 \frac{c}{c}$ $73,000$ CIF USSR $18,000 \frac{68}{69}$ $50,000$ CIF USSR $21,000 \frac{c}{c}$ $59,000$ CIF USSR $21,000 \frac{c}{c}$ $59,000$ CIF USSR $21,500 \frac{c}{c}$ $60,000$ CIF	USSR 26,000 c/ 73,000 CIF d/ Alexandria USSR 18,000 68/ 50,000 CIF Alexandria USSR 21,000 c/ 53,000 CIF Beirut USSR 21,500 70/ 60,000 CIF Beirut USSR 21,500 71/ 22,000 CIF Alexandria USSR 21,500 71/ 22,000 CIF Alexandria USSR 4,300 11/ 12,000 To Egypt and Syria	fighting vehicles (avy tank	fighting vehicles avy tank edium tank uSSR uSSR uSSR 18,000 $\overline{68}$ / 21,000 $\overline{68}$ / 21,000 $\overline{69}$ / 22,000 $\overline{6}$ / 22,000 $\overline{6}$ / 22,000 $\overline{6}$ / 23,000 $\overline{6}$ / 24,300 $\overline{6}$ / 25 personnel carrier uSSR 11,000 c/ 31,000 $\overline{6}$ / 31,000 $\overline{6}$	fighting vehicles uSSR umunition) uSSR uSSR usedium tank uSSR uSSR uSSR uSSR usediam tank uSSR uSSR uSSR usediam tank uSSR uSSR uSSR usediam tank uSSR uSSR uSSR uSSR usediam tank uSSR uSSR usediam tank usediam tank uSSR usediam tank usediam	fighting vehicles uSSR usono clr d/ Alexandria uSSR uSSR uSSR usono clr Beirut uSSR uSSR uSSR usono clr d/ Alexandria uSSR uSSR usono clr d/ Alexandria uSSR uSSR uSSR usono clr d/ Alexandria uSSR usono clr d/ Alexandria uSSR usono clr d/ Alexandria usono clr d/ Alexandria	fighting vehicles avy tank avy tank uSSR 26,000 c/ 73,000 CIF Alexandria USSR 18,000 68/ 50,000 CIF Alexandria USSR 18,000 6/ 53,000 CIF Beirut USSR 21,500 70/ 60,000 CIF Beirut USSR 21,500 70/ 60,000 CIF Beirut USSR 21,500 70/ 60,000 CIF Alexandria USSR 21,500 70/ 60,000 CIF Alexandria USSR 12,000 To Egypt and Syria 10,000 c/ 31,000 To Egypt and Syria 10,000 73/ 17,000 To Egypt and Syria	fighting vehicles avy tank avy tank begin to the following self-propelled gun coverer coverer coverer coverer coverer 1	September Color Color	fighting vehicles avy tank bedium tank uSSR colono c/ self-propelled gum uSSR coverer usser uSSR coverer usser uSSR coverer usser coverer usser coverer usser coverer usser coverer usser uSSR coverer usser coverer usser uSSR coverer usser usser uSSR coverer usser usser coverer usser usser coverer usser usser coverer usser usser usser coverer usser usser coverer usser usser coverer usser usser usser coverer usser usser usser coverer usser usser usser coverer usser usser coverer usser coverer usser coverer usser coverer usser usser coverer usser co	g vehicles k USSR 26,000 c/ 73,000 CIF d/Alexandria USSR 18,000 68/ 50,000 CIF Beirut USSR 21,000 c/ 53,000 CIF Beirut USSR 21,000 c/ 59,000 CIF Beirut USSR 21,000 c/ 50,000 CIF Beirut USSR 8,000 71/ 22,000 CIF Beirut USSR 8,000 71/ 12,000 CIF Beirut USSR 8,000 71/ 12,000 CIF Beirut USSR 11,000 c/ 31,000 To Egypt and Syria ith spares and ammunition) USSR 11,000 c/ 31,000 To Egypt and Syria ith spares and USSR 6,000 73/ 17,000 To Egypt and Syria c gun USSR 6,200 74/ 17,000 To Egypt and Syria uSSR 1,689 75/ 4,700 To Egypt and Syria uSSR 3,333 76/ 9,300 To Egypt and Syria uncher Czechoslovakia 3,600 c/ 10,000 To Egypt uncher

Prices of Land Armaments Exported to the Middle East by the Soviet Bloc July 1955 - June 1956 (Continued)

			TOP SI	EGRE].	į								
	Comment		To Egypt To Egypt CIF Beirut		To Egypt To Syria	To Egypt To Syria	, , , , , , , , , , , , , , , , , , ,	To Syria	To Syria	Io Syria To Egvot	To Egypt and Syria	Egypt	10 Egypt and Syria To Egypt and Syria	Egypt	To Egypt and Syria	IO Egypt To Egypt and Syria
a/	us \$	•	76 36 35		130	12 1.40	•	59	106	36 36	16	18	- 9	2.80	1.40	5. 9.
Price a/	/q q 2		27 c/ 13 c/ 12.5 77/		46 <u>c/</u> 46 <u>c/</u>	4.0 6.5 0.5 0.0	•	21 <u>c</u> /	38 78/	$\frac{9}{13} \frac{c}{c}$	5.6 80/	6.481/	2.183/	1.0 c/	0.5 5/	21 <u>c</u> / 20 <u>c</u> /
	Country of Origin		USSR USSR Czechoslovakia		Czechoslovakia Czechoslovakia	Czechoslovakia Czechoslovakia		Czechoslovakia	USSR	USSR	USSR	USSR	USSR	USSR	USSR	USSR
	Item	Small arms	762-mm rifle. PPS-1943 submachinegun M-25 submachinegun (with spares)	Mines, bombs, rockets, and grenades	Napalm bombs Aircraft rockets	Antitank mines Hand grenades	Ammunition	150-mm self-propelled	122-mm gun 120-mm morfar	T-34 85-mm tank	57'-mm high-explosive antitank	57-mm armor-piercing antitank 37-mm high-explosive antiaircraft	37-mm armor-piercing antiaircraft	37-mm aircraft	20-mm aircraft	7.62-mm (per thousand rounds)

Prices of Land Armaments Exported to the Middle East by the Soviet Bloc July 1955 - June 1956 (Continued)

				I	Ol	Ρ.	SE	CRE	T						
	Comment		To Syria	To Syria	To Syria	To Egypt	To Egypt			To Syria	To Syria.	To Syria	To Syria	To Syria	To Saria
a/	ts \$		5,000	8,400	33,200	3,900	6,400			56,000	120,000	13,000	980	25	560
Price 2	<u>/q</u> 3		1,775 84/	3,000 85/	1, 125 86/	$1,400 \frac{c}{c}$	$2,300 \frac{c}{c}$			20,000 87/	$43,300\overline{88}/$	4, 700 89/	350 90/	8.8 91/	200 92/
	Country of Origin		Czechoslovakia	Czechoslovakia	Czechoslovakia	USSR	USSR			Czechoslovakia	Czechoslovakia	Gzechoslovakia	Czechoslovakia	Czechoslovakia	Czechoslovakia
	Item	Motor transport vehicles	V-3MS (with spares)	T-111 (with apares)	T-805 (ambulance)	GAZ-63	151-517	Miscellaneous ordnance equipment	Radar and electronic units for anti-	aircraft guns	Water purification unit	4-ton crane	Telephone distributor	Gun sights	PZ-3 tank tracks (per ton)
				T(ЭF	> 5	E	CRET	• [٠.		

For the methodology used in the conversion of the prices to dollars, see Appendix A.

Pounds sterling. £1 equals US \$2.80.

c. Estimated price.

^{1.} Cost, insurance, and freight.

[.] Millimeter.



APPENDIX A

METHODOLOGY

1. Total Value of Armament Contracts.

As used in this report, the total value of the armament contracts is the sum of the Egyptian and the Syrian contracts which were negotiated by the Soviet Bloc in the second half of 1955 and the first half of 1956. The over-all values were derived by totaling the values of the pertinent contracts. In some instances, interest payments were included in the contract values, but it could not be established that interest payments were always included in the contract values given.

2. Maximum Figure for Value of Land Armaments.

The maximum figure for the value of the land armaments exported to the Middle East by the Soviet Bloc was derived as follows:

(a) by applying a factor for annual maintenance (spare parts), and based on US experience, to the values of the military vehicles;

(b) by applying a factor for a basic load of ammunition, based on estimates of the basic load used by the USSR, to the weapons sold to Egypt and Syria; and (c) by estimating the value of items known to be exported, but for which prices were not available.

3. Value of Air and Naval Equipment in Armament Contracts.

The value of the naval equipment in the armament contracts was obtained by estimating, for the various types of vessels exported to Egypt, a value representing US costs of replacement in 1955 less depreciation.

The value of the air equipment was derived by applying the export prices, to the quantities of the various types of planes included in the contracts. A factor



for spare parts, including both concurrent spares and annual maintenance, was then applied to the total value of the planes.

4. Price Conversion to Dollars.

Most of the prices concerning the exports of land armaments by the Soviet Bloc to the Middle East were given in pounds sterling. These prices were converted at the official rate of exchange (\$2.80 to the pound). The prices which did not specify pounds sterling but only mentioned pounds were assumed to be sterling and were also converted at the official rate.

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APPENDIX B

GAPS IN INTELLIGENCE

A more detailed study of exports of land armaments by the Soviet Bloc to non-Bloc countries is prevented by insufficient information concerning the following:

- 1. The identity of the country in the Soviet Bloc which produced the individual military end item.
- 2. The precise identification of the model of the particular weapon exported.
- 3. The exact quantities of the land armaments exported.
- 4. The significance of prices quoted for military end items, including the spare parts factor and delivery charges which might be involved.
- 5. The quantities and types of ammunition exported.

Almost no information is available on the deliveries by the Soviet Bloc to the Middle Eastern countries of the many miscellaneous items which are considered ordnance equipment. Detailed information also is needed as to the training of personnel to operate and to maintain the armaments and whether or not the costs of this training are included in the contracts.

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APPENDIX C

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